

**Figure 1**

SEQUENCE ID NO. 1

-2400 CTGCATTATTTGCCCTTGATCCAGCCTGGGAGAAGTCAGGATAGACTTTGGGCTGCTTGGCCCTGGAGGCAGCTTGAGCT  
-2320 GGGACTGGGGTGGGGGGCTCCTGAGGGGCTGCCTAGGACACTGCAGCTTTTGTGCCTTCTCCCTGCTGCCAACACCCCCA  
-2240 CACACACTGCTGCAGCCACTCTAAAGCCCTTTGTCTTTCATTGCTTTAGTCACCCCTTTGTCTCATCTCAAATAGGGGA  
**AP-1**  
-2160 GTGGAAAGGGGCAGTAGAGTTCTCTGGTGATAGCTCCTCTTGCCCCCTGCCCTTCTGGTCTCCACCTTTGTCCGACTC  
-2080 CTCTAGTCCCAGCCCCGTGGCTTAGAACCAGGGTCAGGCAAGTGGTGGGTCAAGAGGTGGGTCTGGCAGTCACAAGGGG  
-2000 GTGGGTGATCCAGGAAGTGATAGGCACCAGGGCAGGTATTACCGACCTGAGCAGGAAGGGAGGGGAAAGGAAGTATTCT  
-1920 GACGGATATGATATGCGGGGACAGGAGGTGACAAAGCAGAGTGAATAGGGGAATAGAGGCAAGAGGAGGTGGTCCACTT  
-1840 CTGGGAAAGGAAAGAGACTGCTGACTGCACTCTCCTTCTGGGGATTTCCTGGGGAAACAAGCAGCCAGAGGATGGGGTG  
**STAT3** **NFkB**  
-1760 AGCAGAAATTGCCCCTACTTCTGAACCCTTCCTTGCCTTGAGAGTTCATACCCAAGACCTCTTTCCGAGTTCCTCCTA  
-1680 TCCAAAGCCAAAGGAATAATTTGCTTCCTTTCCCTAACACCACCTCTTCTCCTCCCAGCCACTTTCCCCACCCAGGCAAT  
-1600 GGATTTCTCCAGTACCCTAATTTCCCTATATGCACAATGCTGTCTCCACCCTCTCCCTGCCCCAGGGAGAATTAAAAAG  
-1520 AAAAGATGACTAGATATTCCAGGAACCACTGGGTTCTCAGAGCAAGTGGGGTGGATGGTGGGAGCCAGGTGGGGATTCT  
**NFkB**  
-1440 CCCAGATTGATACTGGGTGAATCTGGGTTCTGAGAGCAAGTCTTGCCATATGCTGGGGGCTGGCTGACTTGAGGCTGGGG  
-1360 GAGGGTTTAGGGCAGTTGGGAGTGGGTAGGAGCAGGGCCAAAAGCCTGGGGGAAGCTACTGGGAGCTGGGCCAGGGAAAT  
-1280 GGGGAGTCAGGAAGTGGGGAGGGGGAACCCTGGGGGAAATGGAGGCGGAATGGCTGTTCTGGGCTTTGGAGGGGGTGGG  
-1200 TAGTGGTAACCTCAGGAAGGGGGATCCTGAGGGAGAGAAGGGACGTTAGAAAAGAGGAGGTGCCACCCTGGATCCGCCTTC  
-1120 TATAAAAGGAAAAGTCGTTAACCCTCCTGCCTTGTCATCTGCCGCTCTGTTATGTTTCATTCCAAGCAGGATCATCCTA  
**TATA**  
-1040 CCTTTGGGCAGTCAACTCCCTGATCACTGTCTCCTTGCCCTCCCCAATGTTCTGCCTTTTTTACTCTTCCCAGCTGCTCA

## CCAAT

-960 GTTCTATCCTGAGCCATGTCAAGCTACCTCTTTTATTTGTTCTTCCCTCTTGATGCCTCCTTACCTGTTCCCTACCCTCT  
-880 TTTCTCAGGCAGCTCACTCAGTCCCCTCAGCCCTGGAAACCAGCCACTAGGGCCAAAGGGCAGCATGAGGGAGCCTTGAG

## NF1

-800 AAAAGAGAAGCCATGGTAGGTTAGACTATAAGAGCAGGAATTCTCCAGGACCGTGATCCTATCTGTGCATGCCGGCCAG  
-720 GCCCTTTCCCTCACTCTCTGCCTCTCCTGGGGCTCTGTCCCACCAAAAAGGGAAGAGACAGCTGAGGGCTGATTGTGGG  
-640 GTTTGGGAAAAGGCTATGTCATCAGCTGGCCCAGTGCCTATTATCCATTCGGCTGCTAGAGATTCCCTCCCTGGGCAA

## c-krox

-560 GTCCCATTTTTTTGGGAAGCGATGATACCCATCTGAGTCCCACCGACAGAGCTCAGCTGAGTGGCTTAGAGATCAGCC  
-480 AATCAATCGCAGAGGCTCACCATGCTTAAAAGAGCTGGCGGGAGAGAGGCTGGGGAGAACCACAGGGAGACCCACAGA

## CCAAT

-400 CACATATGCACGAGAGAGACAGAGGAGGAAAGAGACAGAGACAAAGGCACAGCGGAAGAAGGCAGAGACAGGGCAGGCAC  
-320 AGAAGCGGCCCAGACAGAGTCTCTACAGAGGGAGAGGCCAGAGAAGCTGCAGAAGACACAGGCAGGGAGAGACAAAGATCC  
-240 AGGAAAGGAGGGCTCAGGAGGAGAGTTTGGAGAAGCCAGACCCCTGGGCACCTCTCCAAGCCCAAGGACTAAGTTTTCT  
-160 CCATTTCTTTAACGGTCTCAGCCCTTCTGAAAACTTGCCTCTGACCTTGGCAGGAGTCCAAGCCCCCAGGCTACAGA  
-80 GAGGAGCTTTCCAAAGCTAGGGTGTGGAGGACTTGGTGCCTTAGACGGCCTCAGTCCCTCCAGCTGCAGTACCAGTGCC  
+1 ATG

## SEQUENCE ID NO. 2

-2000 GTGGGTGATCCAGGAAGTGATAGGCACCAGGGCAGGTATTACCGACCTGAGCAGGAAGGGAGGGGGAAAGGAAGTATTCT  
-1920 GACGGATATGATATGCGGGGACAGGAGGTGACAAAGCAGAGTGAATAGGGGAATAGAGGCAAGAGGAGGTGGTCCACTT  
-1840 CTGGGAAAGGAAAGAGACTGCTGACTGCACTCTCCTTCTTGGGATTTCCTGGGGAAACAAGCAGCCAGAGGATGGGGTG

## STAT3

## NFkB

-1760 AGCAGAAATTGCCCTACTTCTGAACCCTTCCTTGCTTGAGAGTTCATACCCAAGACCTCTTTTCCGAGTTCCTTCCTA  
-1680 TCCAAAGCCAAAGGAATAATTTGCTTCCTTTCCCTAACACCACCTCTTCCTCCCCAGCCACTTTCCCCACCCAGGCAAT

-1600 GGATTTCTCCAGTACCCTAATTTCCCTATATGCACAATGCTGTCTCCACCCTCTCCCTGCCCCAGGGAGAATTAAAAAG

-1520 AAAAGATGACTAGATATTCCAGGAACCACTGGGTTCCTCAGAGCAAGGTGGGGTGGATGGTGGGAGCCAGGTGGGGATTCT

NFkB

-1440 CCCAGATTGATACTGGGTGAATCTGGGTTCCTGAGAGCAAGTCTTGCCATGCTGGGGGCTGGCTGACTTGAGGCTGGGG

-1360 GAGGGTTTAGGGCAGTTGGGAGTGGGTAGGAGCAGGGCCAAAAGCCTGGGGGAAGCTACTGGGAGCTGGGCCAGGGAAAT

-1280 GGGGAGTCAGGAAGTGGGGAGGGGGAACCTGGGGGGAATGGAGGCGGAATGGCTGTTCTGGGCTTTGGAGGGGGTGGG

-1200 TAGTGGTAACTCAGGAAGGGGGATCCTGAGGGAGAGAAGGGACGTTAGAAAAGAGGAGGTGCCACCCTGGATCCGCCTTC

-1120 TATAAAAGGAAAAGTCGTTAACCCCTCCTGCCTTGTCATCTGCCGCCTCTGTTATGTTTCATTCCAAGCAGGATCATCCTA

TATA

-1040 CCTTTGGGCAGTCAACTCCCTGATCACTGTCTCCTTGCCCTCCCAATGTTCTGCCTTTTTTACTCTTCCCAGCTGCTCA

CCAAT

-960 GTTCTATCCTGAGCCATGTCAAGCTACCTCTTTTATTTGTTCTTCCCTCTTGATGCCTCCTTACCTGTTCCCTACCCTCT

-880 TTTCTCAGGCAGCTCACTCAGTCCCTCAGCCCTGGAAACCAGCCACTAGGGCCAAAGGGCAGCATGAGGGAGCCTTGAG

NF1

-800 AAAAGAGAAGCCATGGTAGGTTAGACTATAAGAGCAGGAATTCTCCCAGGACCGTGATCCTATCTGTGCATGCCGGCCAG

-720 GCCCTTTCCTCACTCTCTGCCTCTCCTGGGGCTCTGTCCACCAAAAAGGGAAAGAGACAGCTGAGGGCTGATTGTGGG

-640 GTTTGGGAAAAGGCTATGTCATCAGCTGGCCAGTGCTATTATCCATTTCGGCTGCTAGAGATTCCCTCCCTTGGGCAA

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-560 GTCCCATTTTTTTGGGAAGCGATGATACCCATCTGAGTCCCACCGACAGAGCTCAGCTGAGTGGCTTAGAGATCAGCC

-480 AATCAATCGCAGAGGCTCACCATGCTTAAAAGAGCTGGCGGGAGAGAGGCTGGGGAGAACCCACAGGGAGACCCACAGA

CCAAT

-400 CACATATGCACGAGAGAGACAGAGGAGGAAAGAGACAGAGACAAAGGCACAGCGGAAGAAGGCAGAGACAGGGCAGGCAC

-320 AGAAGCGGCCCAGACAGAGTCTACAGAGGGAGAGGCCAGAGAAGCTGCAGAAGACACAGGCAGGGAGAGACAAAGATCC

-240 AGGAAAGGAGGGCTCAGGAGGAGAGTTTGAGAAGCCAGACCCCTGGGCACCTCTCCCAAGCCCAAGGACTAAGTTTTCT

-160 CCATTTCTTTTAAAGGTCCTCAGCCCTTCTGAAAACCTTGCCCTTGACCTTGGCAGGAGTCCAAGCCCCAGGCTACAGA

-80 GAGGAGCTTTCCAAAGCTAGGGTGTGGAGGACTTGGTGCCCTAGACGGCCTCAGTCCCTCCCAGCTGCAGTACCAAGTGCC

+1 ATG

SEQUENCE ID NO. 3

-1600 GGATTTCTCCAGTACCCTAATTTCCCTATATGCACAATGCTGTCTCCACCCTCTCCCTGCCCCAGGGAGAATTAAAAAG

-1520 AAAAGATGACTAGATATTCAGGAACCACTGGGTTCTCAGAGCAAGGTGGGGTGGATGGTGGGAGCCAGGTGGGGATTCT

NFkB

-1440 CCCAGATTGATACTGGGTGAATCTGGGTTCCCTGAGAGCAAGTCTTGCCCTATGCTGGGGGCTGGCTGACTTGAGGCTGGGG

-1360 GAGGGTTTAGGGCAGTTGGGAGTGGGTAGGAGCAGGGCCAAAAGCCTGGGGGAAGCTACTGGGAGCTGGGCCAGGGAAAT

-1280 GGGGAGTCAGGAAGTGGGGAGGGGGAACCCTGGGGGGAATGGAGGCGGAATGGCTGTTCTGGGCTTTGGAGGGGGTGGG

-1200 TAGTGGTAACTCAGGAAGGGGGATCCTGAGGGAGAGAAGGGACGTTAGAAAAGAGGAGGTGCCACCCTGGATCCGCCTTC

-1120 TATAAAAGGAAAAGTCGTTAACCCCTCCTGCCTTGTCATCTGCCGCCTCTGTTATGTTCAATTCAGCAGGATCATCCTA

TATA

-1040 CCTTTGGGCAGTCAACTCCCTGATCACTGTCTCCTTGCCCTCCCCAATGTTCTGCCTTTTTTACTCTTCCAGCTGCTCA

CCAAT

-960 GTTCTATCTGAGCCATGTCAAGCTACCTCTTTTATTTGTTCTTCCCTCTTGATGCCCTCTTACCTGTTCCCTACCCTCT

-880 TTTCTCAGGCAGCTCACTCAGTCCCCTCAGCCCTTGGAACCAGCCACTAGGGCCAAAGGCAGCATGAGGGAGCCTTGAG

NF1

-800 AAAAGAGAAGCCATGGTAGGTTAGACTATAAGAGCAGGAATCTCCCAGGACCGTGATCCTATCTGTGCATGCCGCCAG

-720 GCCCTTTCCCTCACTCTCTGCCTCTCCTGGGGCTCTGTCCACCAAAAAGGGAAAGAGACAGCTGAGGGCTGATTGTGGG

-640 GTTTGGGAAAAGGCTATGTCATCAGCTGGCCCAGTGCTATTATCCATTTCGGCTGCTAGAGATTCCCCCCCCCTGGGCAA

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-560 GTCCCATTTTTTTGGGAAGCGATGATACCCATCTGAGTCCCACCGACAGAGCTCAGCTGAGTGGCTTAGAGATCAGCC

-480 AATCAATCGCAGAGGCTCACCATGCTTAAAAGAGCTGGCGCGGAGAGAGGCTGGGGAGAACCACAGGGAGACCCACAGA

CCAAT

-400 CACATATGCACGAGAGAGACAGAGGAGGAAAGAGACAGAGACAAAGGCACAGCGGAAGAAGGCAGAGACAGGGCAGGCAC  
-320 AGAAGCGGCCAGACAGAGTCCTACAGAGGGAGAGGCCAGAGAAGCTGCAGAAGACACAGGCAGGGAGAGACAAAGATCC  
-240 AGGAAAGGAGGGCTCAGGAGGAGAGTTTGGAGAAGCCAGACCCCTGGGCACCTCTCCAAGCCCAAGGACTAAGTTTCT  
-160 CCATTTCTTTAACGGTCCTCAGCCCTTCTGAAAACCTTGCCTCTGACCTTGGCAGGAGTCCAAGCCCCAGGCTACAGA  
-80 GAGGAGCTTTCCAAAGCTAGGGTGTGGAGGACTTGGTGCCCTAGACGGCCTCAGTCCCTCCCAGCTGCAGTACCAGTGCC  
+1 ATG

## SEQUENCE ID NO. 4

-1200 TAGTGGTAACTCAGGAAGGGGATCCTGAGGGAGAGAAGGGACGTTAGAAAAGAGGAGGTGCCACCCTGGATCCGCCTTC  
-1120 TATAAAAGGAAAAGTCGTTAACCCCTCCTGCCTTGTTCATCTGCCGCTCTGTTATGTTCAATTCCAAGCAGGATCATCCTA  
TATA  
-1040 CCTTTGGGCAGTCAACTCCCTGATCACTGTCTCCTTGCCTCCCCAATGTTCTGCCTTTTTTACTCTTCCCAGCTGCTCA  
CCAAT  
-960 GTTCTATCCTGAGCCATGTCAAGCTACCTCTTTTATTTGTTCTTCCCTCTTGATGCCTCCTTACCTGTTCCCTACCCTCT  
-880 TTTCTCAGGCAGCTCACTCAGTCCCCTCAGCCCTGGAACAGCCACTAGGGCCAAAGGGCAGCATGAGGGAGCCTTGAG  
NF1  
-800 AAAAGAGAAGCCATGGTAGGTTAGACTATAAGAGCAGGAATTCTCCAGGACCGTGATCCTATCTGTGCATGCCGGCCAG  
-720 GCCCTTTCCCTCACTCTCTGCCTCTCCTGGGGCTCTGTCCCACCAAAAAGGGAAAGAGACAGCTGAGGGCTGATTGTGGG  
-640 GTTTGGGAAAAGGCTATGTCATCAGCTGGCCAGTGCCTATTATCCATTTCGGCTGCTAGAGATTCCCCCCCCCTGGGCAA  
c-krox  
-560 GTCCCATTTTTTTGGGAAGCGATGATACCCCATCTGAGTCCCACCGACAGAGCTCAGCTGAGTGGCTTAGAGATCAGCC  
-480 AATCAATCGCAGAGGCTCACCATGCTTAAAGAGCTGGCGCGGAGAGAGGCTGGGGAGAACCACAGGGAGACCCACAGA  
CCAAT  
-400 CACATATGCACGAGAGAGACAGAGGAGGAAAGAGACAGAGACAAAGGCACAGCGGAAGAAGGCAGAGACAGGGCAGGCAC  
-320 AGAAGCGGCCAGACAGAGTCCTACAGAGGGAGAGGCCAGAGAAGCTGCAGAAGACACAGGCAGGGAGAGACAAAGATCC

-240 AGGAAAGGAGGGCTCAGGAGGAGAGTTTGGAGAAGCCAGACCCCTGGGCACCTCTCCCAAGCCCAAGGACTAAGTTTCT  
-160 CCATTTTCCTTTAACGGTCCTCAGCCCTTCTGAAAACCTTGCCTCTGACCTTGGCAGGAGTCCAAGCCCCAGGCTACAGA  
-80 GAGGAGCTTTCCAAAGCTAGGGTGTGGAGGACTTGGTGCCCTAGACGGCCTCAGTCCCTCCCAGCTGCAGTACCAGTGCC  
+1 ATG

## SEQUENCE ID NO. 5

-800 AAAAGAGAAGCCATGGTAGGTTAGACTATAAGAGCAGGAATTCTCCAGGACCGTGATCCTATCTGTGCATGCCGGCCAG  
-720 GCCCTTTCCCTCACTCTCTGCCTCTCCTGGGGCTCTGTCCACCAAAAAGGGAAGAGACAGCTGAGGGCTGATTGTGGG  
-640 GTTTGGGAAAAGGCTATGTCATCAGCTGGCCAGTGCCATTATCCATTTCGGCTGCTAGAGATTCCCCCCCCTGGGCAA  
c-krox  
-560 GTCCCATTTTGGGAAGCGATGATACCCCATCTGAGTCCACCGACAGAGCTCAGCTGAGTGGCTTAGAGATCAGCC  
-480 AATCAATCGCAGAGGCTCACCATGCTTAAAGAGCTGGCGCGGAGAGAGGCTGGGGAGAACCCACAGGGAGACCCACAGA  
CCAAT  
-400 CACATATGCACGAGAGAGACAGAGGAGGAAAGAGACAGAGACAAAGGCACAGCGGAAGAAGGCAGAGACAGGGCAGGCAC  
-320 AGAAGCGGCCAGACAGAGTCTACAGAGGGAGAGGCCAGAGAAGCTGCAGAAGACACAGGCAGGGAGAGACAAAGATCC  
-240 AGGAAAGGAGGGCTCAGGAGGAGAGTTTGGAGAAGCCAGACCCCTGGGCACCTCTCCCAAGCCCAAGGACTAAGTTTCT  
-160 CCATTTTCCTTTAACGGTCCTCAGCCCTTCTGAAAACCTTGCCTCTGACCTTGGCAGGAGTCCAAGCCCCAGGCTACAGA  
-80 GAGGAGCTTTCCAAAGCTAGGGTGTGGAGGACTTGGTGCCCTAGACGGCCTCAGTCCCTCCCAGCTGCAGTACCAGTGCC  
+1 ATG

## SEQUENCE ID NO. 6

-400 CACATATGCACGAGAGAGACAGAGGAGGAAAGAGACAGAGACAAAGGCACAGCGGAAGAAGGCAGAGACAGGGCAGGCAC  
-320 AGAAGCGGCCAGACAGAGTCTACAGAGGGAGAGGCCAGAGAAGCTGCAGAAGACACAGGCAGGGAGAGACAAAGATCC  
-240 AGGAAAGGAGGGCTCAGGAGGAGAGTTTGGAGAAGCCAGACCCCTGGGCACCTCTCCCAAGCCCAAGGACTAAGTTTCT  
-160 CCATTTTCCTTTAACGGTCCTCAGCCCTTCTGAAAACCTTGCCTCTGACCTTGGCAGGAGTCCAAGCCCCAGGCTACAGA  
-80 GAGGAGCTTTCCAAAGCTAGGGTGTGGAGGACTTGGTGCCCTAGACGGCCTCAGTCCCTCCCAGCTGCAGTACCAGTGCC

+1 ATG